BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

Indent/Tender Reference No: BESCOM/ 23-24/IND0012
Dated: 16.09.2023

Section-IV

TECHNICAL SPECIFICATION

Replacement of existing Video Projection Wall System (VPS) by new VPS at both Control Centres (HSR & Rajajinagar) DAS, BESCOM, Bangalore for three years standard warranty plus two years of AMC service.

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1 Introduction

This work includes Supply, Installation, Commission and Maintenance of Video Projection Wall at BICC-1, HSR Layout and BICC-2, Rajajinagara in Bengaluru. The Contractor shall release existing LED based VPS system at both the BICC-1 and BICC-2. Further, contractor shall supply, install, commission and carry out the annual maintenance of VPS and support accessories.

2 Preamble

Bangalore Electricity Supply Company Limited (BESCOM) has established Distribution Automation System for 11kV distribution network in Bengaluru city. The Video projection system (VPS) equipment's are installed at BESCOM Integrated Control Centre1 at HSR Layout and BESCOM Integrated Control Centre-2 at Rajajinagar, Bengaluru for the enlarged display of the graphic images of BMAZ of electricity distribution network and capable of presenting standard video images on selected projection display units through the VPS graphics wall server. The tender is invited for replacement of existing Video projection Wall system by new Video projection Wall system at both BICC-1, HSR Layout and BICC-2, Rajajinagar.

3 Scope of Work

The scope of work includes Supply, Installation, Commission and Maintenance of Video Projection Wall at BICC-1, HSR Layout and BICC-2, Rajajinagara in Bengaluru.

The Contractor shall release existing LED based VPS system at both the BICC-1 and BICC-2. Further, contractor shall supply, install, commission and carry out the annual maintenance of VPS and support accessories.

In case of defect/ failure of the installed equipment/accessories within the warranty period, the contractor shall replace and provide service for the same at free of cost.

1. PERIOD OF CONTRACT

3.1 Employer Responsibilities

Employer responsibilities in support of scope of work will include:

1) Monitoring the Installation of Video projection Wall system at both the control centres.
2) Providing the support from BESCOM end for the successful installation and commission of the VPS at both the control centres.
3) Making provision for the power supply to test the installation.

3.2 Contractor Responsibilities

Contractor responsibilities in support of scope of work will include:

1) The Contractor shall be responsible for supplying and installing the required Video projection Wall equipment in good working order and fit for its intended purpose.

2) The Contractor shall also release existing Video projection system from both the control centres.

3) The Contractor shall supply the material only after testing and Physical Inspection. The supply shall be made based on the delivery instruction issued by GM (DAS) duly adhering to prevailing governmental rules.

4) The Contractor has to establish a store and guard the materials/equipment at his own cost. The Contractor is responsible for proper handling and storage of released materials until installation. The Contractor shall make arrangement to store the released materials in good condition.

5) Any injury or loss to the life of human being/animals or damages to any Government/ private property during the execution of the work shall be on the account of Contractor and has to make good the damages. Claims arising out of injury and loss to the life or damages shall have to be borne and settled by the Contractor.

6) The Contractor should rectify any damages caused while executing the work at his own cost.

7) It is the responsibility of the Contractor to carryout work in safe manner with at most utilization of safety equipment. The Contractor has to abide by the prevailing standard safety policy.

8) Any other Electrical and /or civil works including supply and erection which are not included in the item rate schedule but required to the complete the work shall be carried out by the Contractor on recommendation of the Engineer-in-charge with approval from the competent authority.

3.3 Applicable Standards

VPS supplied under this contract shall be certified as an ISO 9001:2015 approved facility. A certificate of ISO 9001:2015 registration must be included with the bid documents.

3.4 Common Communication System Specifications

The following specifications present the requirements that apply to Video Projection System to be provided by the Contractor except as otherwise noted.

3.4.1 General Requirements

Video Projection System shall be designed, fabricated, assembled, finished, and documented with workmanship of the highest production quality and shall conform to all applicable quality control standards of the original manufacturer and the Contractor. All components shall be of current production from reliable component manufacturers.

To satisfy these Technical Specifications, manufacturer standard designs shall be used to the fullest extent possible.

All materials comprising the Video projection System shall be new and unused and consist of the best industrial grade. Materials promoting the growth of fungus or susceptibility to corrosion and heat degradation shall not be used. In addition, steps shall be taken to provide rodent proof installations.

To facilitate expansion and maintenance, modularity shall be employed in the design of the equipment. All major subassemblies shall carry permanent labels providing a cross-reference to the Contractor's documentation.

All features of the proposed equipment, as described in the Contractor's bid and in the bid's reference materials, shall be fully supported by the equipment actually delivered.

3.4.2 Maintainability

The Employer prefers Video projection System designs that do not require periodic preventive maintenance and inspections.

3.4.3 Service Conditions

The Video projection system installed should be able to display fine resolution of the electrical network and the equipment installed. The system should not alter for the high data flow during the extreme weather conditions in which the alarms will be more.

3.4.4 Immunity to Electrical Stress and Disturbances

The electrical and electronic components of the Video Projection System shall satisfy the requirements for insulation, isolation, and electrical immunity stated herein. The ability to meet these requirements shall be demonstrated by Test certificate.

3.4.5 Power Supply

The Power supply for the Video projection system at the control centres will be provided by Employer.

3.4.6 Corrosion Protection

Except for stainless steel, all steel surfaces that are not galvanised shall be treated to protect against corrosion. All structural steel and all exterior and interior steel surfaces of the equipment, as well as nuts and bolts associated with galvanised parts, shall be hot-dipped galvanised in accordance with ASTM specifications or their equivalent.

4 Site Acceptance

As soon as the installation has been completed and put in a tight and clean condition as specified in the Technical Specifications, the Contractor shall so notify BESCOM in writing. BESCOM shall verify proper installation at site by Engineer and issue the site acceptance.

5 Warranty

The Contractor shall provide warranty services for the material supplied for a period of 3 years following completion of installation, verification and acceptance by BESCOM (Site Acceptance).

6 Technical Specification

Supply and Installation of new Video projection system in the wall(Technology: Micro LED) of area 324sqft (2 Sets: One Set at BICC-1,HSR Layout and One Set at BICC-2, Rajajinagar) with Automatic Data Processing machine and Controller including all accessories for above configuration of video wall with 3 Years warranty

The Contractor shall provide test procedure to test parameters given in this section.

1) Display Contrast and Brightness

2) Continuous working of the VPS without powering off

3) Capacity to handle data of the electrical network with high resolution.

Sd/-

General Manager,
DAS, BESCOM